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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,195	03/02/2000	Charles E. Young	30408-1001-	4692
5179	7590	03/10/2004	EXAMINER	
PEACOCK MYERS AND ADAMS P C P O BOX 26927 ALBUQUERQUE, NM 871256927			REAGAN, JAMES A	
		ART UNIT	PAPER NUMBER	
		3621		

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/517,195	YOUNG, CHARLES E. <i>M.E.</i>	
	Examiner	Art Unit	3621
	James A. Reagan		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 December 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6,8-15 and 18-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6,8-15 and 18-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Status of Claims

1. This action is in response to the Request for Continued Examination (RCE) filed on 29 December 2003 (paper #8).
2. Claims 1-6, 8-15, and 18-20 have been examined.

RESPONSE TO ARGUMENTS

3. Applicant's arguments with respect to claims 1-6, 8-15, and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requires of this title.

5. Claims 1-6, 8-15, and 18-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to nonstatutory subject matter. The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the

technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, the recited steps of merely *displaying viewer reactions to a display object, collecting cognitive viewer reactions , etc.* does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed without the use of any technological apparatus, system or method such as, for example, a computer system, database, electronic circuit, or software application. These steps only constitute a method that is easily attainable without the use of any state-of-the-art devices or techniques.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claims 10 and 20 recite *an aspect of a display of each spatial region being a function of the correlated viewer reactions for the region.* It is unclear to the Examiner on what basis a correlation is formed between viewer reactions and the display object, or how the

correlation is mapped and defined between viewer and image. For the purposes of this examination, the Examiner will assume that images are displayed based on the expected and positive responses by the viewers that would support the observation of increased awareness of specific combinations of color tingeing and transparencies.

8. Claims 10 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claims 10 and 20 recite *displaying a plurality of images corresponding to a plurality of viewer exposures to the display image*. It is unclear to the Examiner on what basis a correlation is formed between viewer reactions and the display object, or how the correlation is mapped and defined between viewer and image. For the purposes of this examination, the Examiner will assume that images are displayed based on the expected and positive responses by the viewers that would support the observation of increased awareness of specific combinations of color tingeing and transparencies.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-6, 8-15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buxton et al. (US 6,118,427 A).

Examiner's note: Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the *entire* reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claims 1 and 11:

Buxton, as shown, discloses the following limitations:

- a) *dividing the display object into a plurality of spatial regions* (see at least Figures 1, 2, and 13-16, and associated text);
- b) *collecting cognitive viewer reactions to an exposure to the display object* (see at least Figure 4 and associated text);
- c) *correlating the viewer reactions with the spatial regions* (see at least Table 1 and associated text); and
- d) *displaying to an evaluator the display object with an aspect of a display of each spatial region being a function of the*

correlated viewer reactions for the region, said aspect selected from the list consisting of transparency, color tingeing, and combinations thereof (see at least column 1, lines 15-20; column 2, line 41; column 7, line 48 to column 8, line 41).

Buxton does not specifically disclose collecting cognitive viewer reactions. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the GUI-based user performance optimization system by applying the same techniques to a system that seeks to increase consumer awareness of a particular product by optimizing viewer reactions to matter such as advertisements, magazines and other printed publications, or electronic publications for the purpose of maximizing revenues, and measuring the response time or other similar cognitive viewer responses that would indicate increased viewer attention.

Claims 2 and 12:

With regard to the limitation of the dividing step comprises dividing the display object into a matrix, with each spatial region being a cell of the matrix, see at least Figures 1, 2, and 13-16, as well as the related text.

Claims 3 and 13:

Buxton discloses the GUI-based user performance optimization system as shown above. Buxton does not specifically disclose *the collecting step comprises exposing a viewer to the display object for a duration between 1/4 and*

4 seconds. However, Buxton does disclose "A total of 576 trials were run for each user; 14 users were tested. Trials were presented in random order at 5 second intervals (column 9, lines 30-32)." It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Buxton's use of the five second interval by employing diverse interval values, depending on the system requirements and the data gathering metrics, as well as the intent of the system, because adjusting the temporal display period would allow a system evaluator to observe dissimilar information that may not be readily apparent if the time intervals were not varied.

Claims 4, 5, 14, and 15:

With regard to the limitations of:

- *the collecting step comprises exposing a plurality of viewers to the display object; and*
- *the collecting step comprises exposing a viewer to a plurality of exposures to the display object.*

See at least column 9, lines 30-32.

Claims 8, 9, 18, and 19:

With regard to the limitations of:

- *the displaying step comprises displaying a static image; and*
- *the displaying step comprises displaying images as a motion picture.*

See at least column 4, line 11.

Claims 10 and 20:

With regard to the limitation of *the displaying step comprises displaying a plurality of images corresponding to a plurality of viewer exposures to the display image*, Buxton discloses, “Utilizing these optimal transparency thresholds, the present invention provides a GUI for maximized user performance and improved system efficiency” (column 14, lines 15-17) and, “...optimal thresholds of the present invention facilitate more insightful use of visual enhancement techniques” (column 15, lines 33-36), indicating that the positive testing results are used to alter the manner in which graphical images are presented to a viewer to enhance systems goals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **James A. Reagan** whose telephone number is **(703) 306-9131**. The examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **James Trammell** can be reached at (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **(703) 305-3900**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687 [Official communications; including

After Final communications labeled "Box AF"]

(703) 308-1396 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451
Crystal Drive, Arlington, VA, 7th floor receptionist.

JAR
04 March 2004

